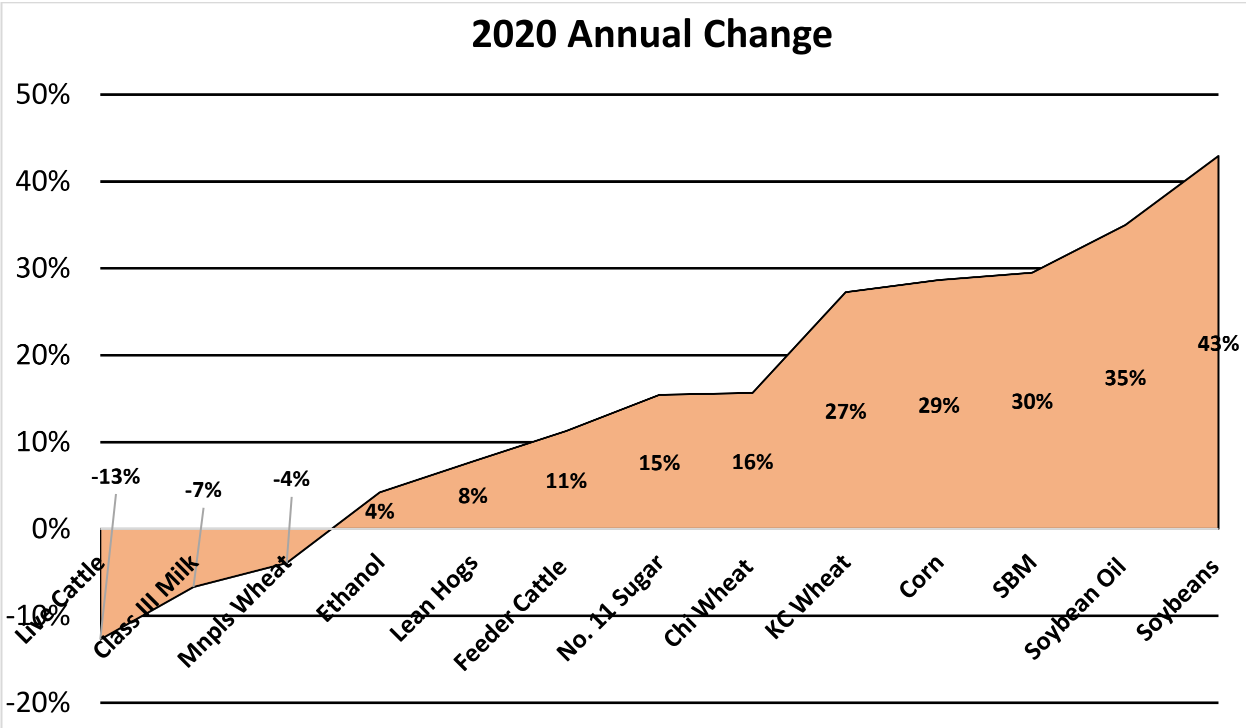
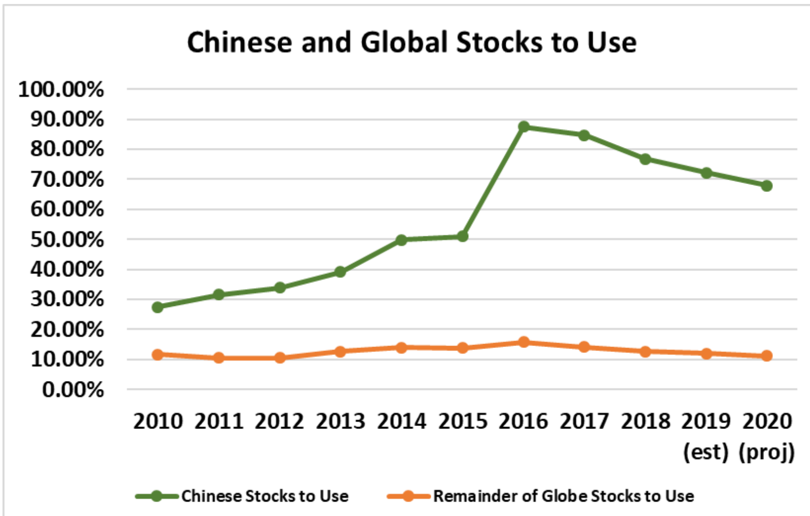


It's been a wild year in agricultural commodities. The above chart indicates the change we've seen on the continuous chart year over year on a closing basis. Keep in mind that for *most* of these commodities, we saw lows set in March or April, meaning total rallies over the course of the year are actually much larger.

Corn

Corn markets have had one of their best performing quarters in several years as export sales continued to run well above last year's pace. In fact, if 2020 shipments meet the levels projected in the December 2020 United States Department of Agriculture World Agricultural Supply and Demand Estimates (WASDE) report, corn will beat the peak 2017 year by a whopping 10 million metric tons.

Specifically, China is anticipated to be the main "new" driver, although the European Union and Mexico are still the largest buyers. The situation with China has presented some challenges from a projection standpoint as USDA's standard operating procedure is to use existing trade policy. At this time, China's tariff rate quota on corn is 7 mmt. However, they've already purchased something to the tune of 10 mmt from the U.S., alone. In November, USDA raised the Chinese import number to 13 mmt. In December, they raised it again to 16 mmt. USDA's attache in Beijing has stated they feel corn imports could reach 22 mmt - although that is not official policy at this time. Further, the Chinese revision of 200 mmt of additional corn supplies that were added in 2016 have never been reconciled by the trade. The existence of these stocks has become somewhat of a Schroedinger's Cat situation. Argentina has put a stop to corn exports until March of 2021. The uncertainty, along with the fact that South America produces around 70% of its corn crop as a second crop (meaning it's not planted yet), and that total global corn stocks to use ratio (outside of China) is the lowest since 2012, leaves enough risk that some sort of premium is warranted at this time.



Corn demand for ethanol use is also projected to rise from the 2019 crop as gasoline demand rebounds from the COVID-inflicted lows. Feed usage is expected to slide, but year over year usage is currently looking at an estimated 938 million bushels more than the 2019 crop year (at higher prices!).

From a production standpoint, USDA reduced their projected yield in the November report to 175.8 bushels an acre. No changes are typically made in December with USDA holding off on major supply changes until the January Final Crop Production report, which is set for release on January 12th, 2021. At this point, the 175.8-bushel estimate is roughly a bushel above the 20-year linear trendline yield. Published trade expectations so far indicate a small amount of downside bias. However, there are two weeks left for further private estimates to be released.

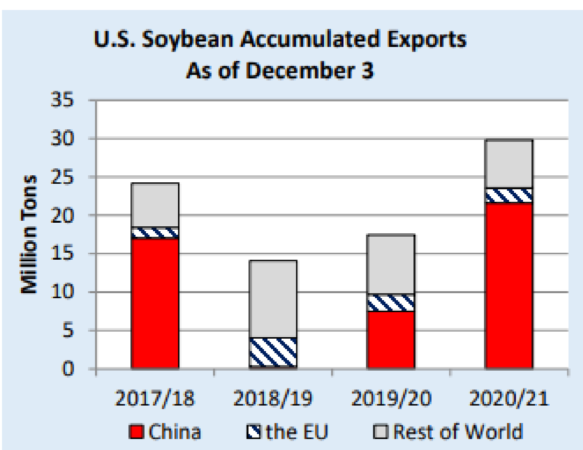
Ending stocks are estimated at 1.702 billion bushels, which if realized would be the lowest ending stocks since 2013. If looking at stocks to use, USDA's current 2020 corn estimate indicates 11.48%, which would also be the tightest since 2013. USDA's projected price for 2020 corn is currently $4.00 - 44 cents better than what was realized for the 2019 crop.

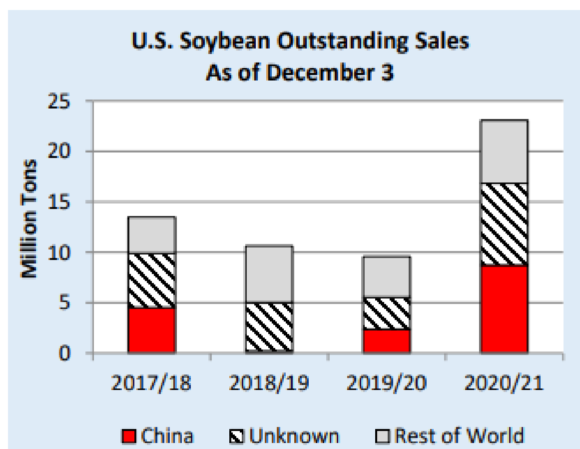
Soybeans

As noted in the chart above, soybeans have led the way this year with soybean front month contracts up a massive 43% on the year. This has been supported by continuing strength in crush markets (although the month of December has seen margins steadily decline). As with corn, much of this strength has been due to global influences. It should be noted, however, the importance of declining yield estimates from USDA since August can't be underestimated.

On production, USDA stayed with the November yield estimate of 50.7 bushels per acre. That number is very similar to what it was in 2018. The lower planted area, however, means production is still less than what was seen that year. Like corn, USDA will generally wait to further revise production until the January 12th Final Production Report. One interesting note on soybeans is that USDA has shown considerable willingness to revise production retroactively. Due to the sharp change in ending stocks, and the rapid disappearance in quarterly stocks through 2019, it is not unlikely we see a revision to 2019 production but rather the actual effect will be more to "balance the books" than to change the landscape of the market.

Demand, along with South American production estimates in January, February and March, is going to be the most watched area. From a U.S. standpoint, export demand has been stellar with shipments more than keeping the pace needed to meet sales projections - something that we have not seen in corn. The U.S. soybean shipment season typically winds down around February as South American supplies become available. It is not unlikely that exporters are working hard to get bushels out the door before that change takes place. USDA is currently projecting exports of 2.2 billion bushels for the 2020 crop, up 524 mb from 2019.





*Source: USDA Foreign Agricultural Service December 2020 Oilseed Report

Globally, much focus has been put on the Brazilian crop and the unusually dry growing season they've experienced. At this point, USDA has declined to cut much production from the Brazilian balance sheet, leaving their December estimate at 133 mmt compared to the estimate of 126 mmt for 2019. CONAB (Brazil's USDA equivalent) is estimating 134.95 mmt through November.

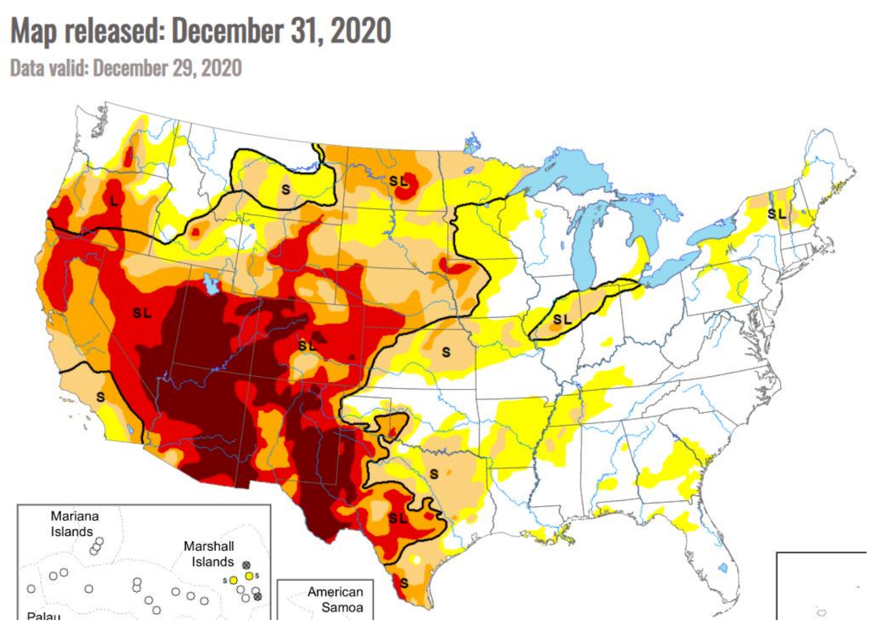
AgCountry Farm Credit Services

USDA December carryout projection for 2020 soybeans is 175 mbu, which is the lowest December estimate since the 2014 season. If that estimate is realized, it would be the tightest stocks to use ratio since 2013. Keep in mind that soybean stocks to use only explain a portion of the ending season price due to the impact of crush margins and global balance sheets. As of December, USDA is projecting a season ending price of $10.55 per bushel compared to the $10.40 per bushel estimated in November, and the $8.57 final market year average price for the 2019 crop.

Wheat

Of the three major grains, wheat has posed the most reluctance to move higher. Balance sheets are showing some improvement, but they remain amply supplied. Exports have improved in this market as well. White wheat has seen the most improvement, although Hard Red Spring exports have been healthy. Indonesia has shown significant interest in higher protein wheat while Canada has seen the biggest benefit for this crop year.

In January, USDA will issue its preliminary winter wheat plantings estimate. At this time, estimates for area are variable largely due to the drought in the Southern Plains. While this is concerning because of the strength and persistence of this drought, the dryness itself will have very little impact on yield potential right now. Poor establishment won't be evident until next spring. Winter wheat only needs to germinate, not emerge, to be fully vernalized. With that being said, a poor stand and higher soybean, milo, or cotton prices would make it much easier for producers to make the decision to tear out the wheat.



Source: University of Nebraska – Lincoln National Drought Mitigation Center U.S. Drought Monitor

Globally, December saw Russia threaten an export tax due to concerns about domestic supply. This issue has appeared in other years and historically has been more of a buy the rumor, sell the fact effect. You should, however, note that each situation is unique. Of note, Australia is returning to historically "normal" production after a tough three-year drought stretch. USDA is currently forecasting Australia to produce 30 mmt - twice what they produced in the 2019 season. Unfortunately for their producers, Australia is having their own trade issue with China at the moment, which is likely to result in a rearrangement of current wheat trade flows. China is typically not a player in world wheat markets, usually remaining self-sufficient. However, as the market has seen in corn and soybeans, the country is showing an unusual import appetite. U.S. wheat producers may benefit from this, but Canada is likely to be the first choice. Pakistan is also estimated to import more wheat than they have in 12 years.

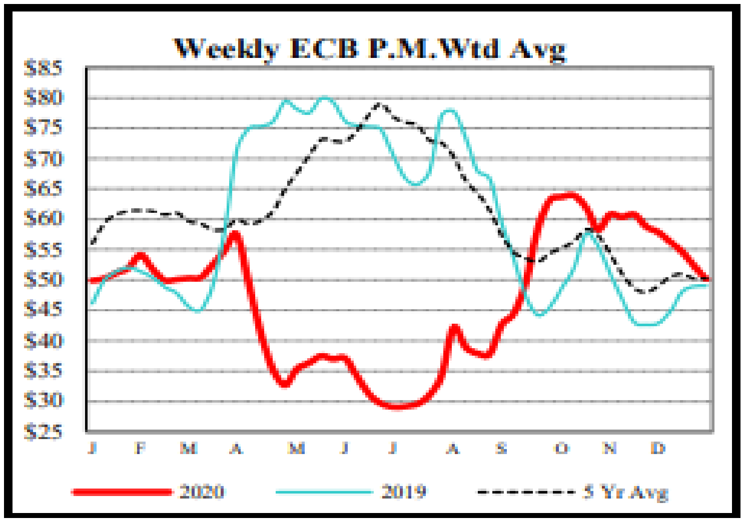
USDA is currently projecting a market year average price on 2020 wheat of $4.70, which is 12 cents better than the market year average price on 2019 supplies.

Dry Beans

The dry bean market remained stable through the fourth quarter of 2020 for the major classes grown in Minnesota and North Dakota. Rising prices of competing commodities will provide competition for new crop acres, although contracts are typically not released until after the New Year. USDA's last weekly dry bean market report was issued on December 15th. At that time, warehouse bids for black beans in Minnesota and North Dakota were up as much as $4.00 with a high bid of $29.00 per hundredweight. Other classes were unchanged up to $1.00. This indicates some firmness. Delivery of dry beans in the winter is minimal, which leaves a somewhat thin market in January. USDA's annual dry bean market summary as well as the final crop production report will be released in January, giving more information on final 2020 production.

Pork

Pork producers have had an exceptionally volatile year with prices bottoming in May as packing plants idled down due to labor concerns (COVID-19). While the ability to process hogs was impaired through the spring, the summer and fall months more than made up for it with total hog slaughter this past winter and periodically through the summer that far exceeds 2019 totals. Another challenge has been seasonality, with both carcass prices and live prices bottoming in July. This time of the year is typically more of a peak. This led to an odd rally right up until October, after which point, we have seen some seasonal decline.



Source: USDA AMS National Daily Hog and Pork Summary Dec 31, 2020

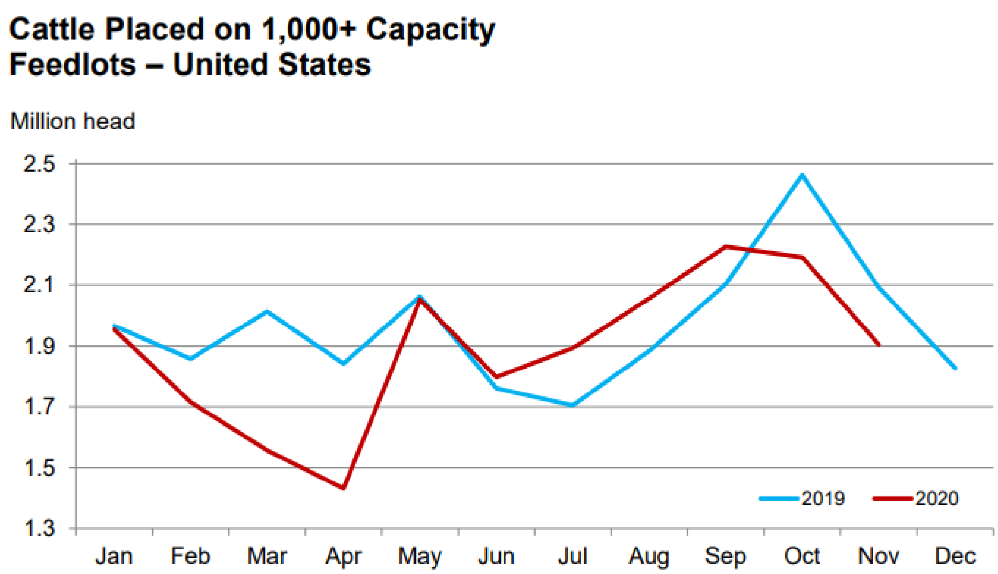
USDA released its quarterly Hogs and Pigs report December 23rd in which they indicated a noticeable drop in total hog inventory. Total hogs and pigs as of December 1st, 2020, totaled 77.5 million head, which is down 1% on the year. Of note, total breeding inventory was down 3% on the year and 1% on the quarter, meaning liquidation is underway on some level. Farrowing is down 1%. This will likely mean that next summer will see less available market hogs, but not to a massive extent. Given the poor margins seen through half the year this isn't a big shock to the market.

USDA WASDE reports show the agency is projecting a small seasonally normal decline in pork production starting in Q1 of 2021 before production picks back up. USDA slightly increased its total production estimates for both 2020 and 2021 in December, while also increasing the projected annual national live equivalent price from $43.00/cwt to $43.25/cwt. There was no change made to the 2021 forecast at this time. Exports are expected to continue growing in 2021. This is partially on demand from China and partially due to a rearrangement of global trade flows after Germany broke with African Swine Fever earlier this fall.

Beef

Beef markets have struggled more than the other commodities this year as plant back ups from COVID and the general biological lag associated with the longer production cycle both impacted prices. Seasonality was somewhat affected with the drought in the southern plains forcing early weaning and an a-typical placement cycle.

The affect of the drought is evident in the December 2020 Cattle on Feed report issued by USDA December 18th. Total November placements of calves into feedlots was down 9% from November of 2019. As you can see from the chart below, the flow of cattle through the system has been unsteady this year, to say the least. The wide range of weights, increasing feeder prices, and higher feed costs will combine to put a pinch on feedlot profitability in the near term.



Source: USDA December 2020 Cattle on Feed Report, December 18, 2020

Keep in mind, "placed" cattle do not include those in backgrounding lots, so those animals are not included in the chart above.

USDA WASDE annual beef production estimates in December were raised 35 million pounds from November. USDA attributed this increase to a higher non-fed cattle slaughter. This can indicate herd liquidation is taking place. The fact that cull sales are likely to slow and previous placements would indicate less poundage through the first half of 2021 led USDA to decrease their total production numbers for 2021. Weakness so far this year also pushed USDA to reduce their projected price for 2020 from \$108.71/cwt to \$108.46/cwt. This is not a huge change but given the higher than expected feed costs in the 4th quarter, certainly not a welcome one for most producers. The lower production and relatively stable demand expected in 2021 did result in USDA raising their average 2021 price by \$1/cwt to \$115. USDA's projected beef price is based on the five-state direct ship average for all grades.

Dairy

Milk prices have struggled in the 4th quarter of 2020 as production outstripped demand. Based on USDA WASDE reports in December, U.S. production is expected to total 222.7 billion pounds of milk for 2020 compared to 218.4 billion pounds in 2019 and 217.6 billion pounds in 2018. Production isn't expected to decrease in 2021 either, with USDA slightly raising its total 2021 estimate from November. Spot milk sales have been soft compared to contracted milk, underlining the fact that the fluid milk market is fairly saturated.

There has been some discussion that the stimulus bill passed by Congress the last week of 2020 will offer some demand spark as the government purchases supplies on behalf of food programs across the

U.S. This demand will undoubtedly absorb some production in the short to intermediate term, but is unlikely to provide support in the long term.

USDA price projections for 2021 call for the price pressure of Q4 of 2020 to continue into the new year. USDA's December WASDE report reduced the expected price for cheese and butter. The reasoning by the agency was weaker foreign demand for U.S.-originated cheese along with cow numbers persisting higher. Lower cheese and butter prices pushed the projections for Class III and Class IV milk lower, respectively. Prices for nonfat dry milk and dry whey were steady to stronger due to whey export demand. All milk price projections were reduced from $18.25/cwt to $16.60/cwt.

Ethanol

Despite the promising return to breakeven margins in July 2020, ethanol margins have slipped back into negative territory. This is largely due to corn price rallies outstripping the pace of ethanol price improvement. While gasoline usage has improved, and the development of a COVID vaccine raises hopes of a return to "normal" driving sooner rather than normal, plants are expected to continue struggling. The industry as a whole appears to be undergoing a shift where only the most efficient plants are likely to survive long term. Corn prices are expected to remain well supported over at least the next few months, giving little hope of a major reprieve in the short term.

One encouraging note is that the industry has done a better job the past six months of 2020 managing inventory. Stocks of ethanol have risen through the 4th quarter, however, they remain well within historical bounds of the past four years.

On the intermediate to longer term horizon, politics appears to be the biggest risk to this industry. The incoming Biden administration would tend to higher regulations on environmental issues but is less likely to see ethanol as a major focal point of their energy agenda.